



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

100

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/767,048	01/22/2001	Rajesh Ramankutty	00-1070	4450

7590 09/14/2004

McDonnell Boehnen Hulbert & Berghoff
32nd Floor
300 S. Wacker Drive
Chicago, IL 60606

EXAMINER

WAHBA, ANDREW W

ART UNIT	PAPER NUMBER
----------	--------------

2661

DATE MAILED: 09/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/767,048

Applicant(s)

RAMANKUTTY ET AL.

Examiner

Andrew W Wahba

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01/22/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01/22/2001 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 05/30/01.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howes et al (US Patent 6,366,558) in view of Loehndorf (US Patent 6,094,437).

With regard to claims 1, 4, 5, 9, 10 and 14, Howes et al discloses an active local director 404 (primary LNS) and a standby local director 406 (peer LNS) that communicate between a group of physical machines (CPE) and the Internet 400 via a switch 408 (LAC to a network) (column 9, lines 52-57 and column 10, lines 5-8). The active local director 404 (primary LNS) and a standby local director 406 (peer LNS) maintain a RS-232 link that is used to transfer (determining) configuration information (state information) (column 9, lines 57-62). Accordingly, a first information may be transmitted through the active local director 404 and a second information may be transmitted through the standby local director 406.

Howes et al does not disclose or fairly suggest the establishing of a establishing a first tunnel or second tunnel to transmit a first or second information.

Art Unit: 2661

Loehndorf, Jr. et al disclose a L2TP Access concentrator (LACs) and L2TP network servers (LNSs) that are attached to a L2TP tunnel (first and second tunnel) merging and management service (LTM) 20 (column 8, line 23-26).

A person of ordinary skill in the art to which the invention pertains would have been motivated to employ Loehndorf, Jr. et al in Howes et al to achieve load balancing in a system that employs tunneling. As described by Loehndorf, Jr. et al tunneling is widely used in modern day communications (column 1, lines 19-21) for the purpose of encapsulating the data of a first network while the data is transmitted across a second network, such as the Internet (column 1, lines 43-48). At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Howes et al with Loehndorf, Jr. et al (collectively Howes-Loehndorf) to obtain the invention as specified in claims 1, 4, 5, 9, 10 and 14.

With regard to claim 2, the active local director 404 and a standby local director 406 maintain a RS-232 link that is used to transfer (requesting) configuration information (column 9, lines 57-62).

With regard to claim 3 and 8, as result of the transfer step either the active local director 404 or standby local director 406 will be inoperable (detecting/determines). By transmitting to the appropriate local director 404 or 406, the switch 408 confirms the switchover and communicates with an active channel. As explained by Howes et al, there are many ways to define a state as active (column 10, 15-18).

Art Unit: 2661

With regard to claim 6 and 7, it is inherent that the switch 408 (LAC) receives switchover requests. Otherwise, the switch 408 would not communicate with the correct local director 404 or 406. Accordingly, the switch 408 may confirm (reply) the switchover. By transmitting to the appropriate local director 404 or 406, the switch 408 confirms the switchover.

With regard to claim 11 and 12, it is inherent that the switch 408 communicates with the appropriate local director 404 or 406. By transmitting to the appropriate local director 404 or 406, the switch 408 confirms the switchover and communicates with an active channel. As explained by Howes et al, there are many ways to define a state as active (column 10, 15-18).

With regard to claim 13, Howes et al discloses a group of physical machines (CPE) that communicate a switch 408 (access concentrator) (column 10, lines 5-8).


3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew W Wahba whose telephone number is (571) 272-3081. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

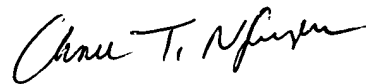
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information

Art Unit: 2661

for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew Wahba 

August 30, 2004



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600